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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,080	10/12/2004	Andreas Ruther	PAT-00356	7054
26922	7590	02/19/2008	EXAMINER	
BASF CORPORATION Patent Department 1609 BIDDLE AVENUE MAIN BUILDING WYANDOTTE, MI 48192			TSOY, ELENA	
			ART UNIT	PAPER NUMBER
			1792	
			NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/511,080	Applicant(s) RUTHER ET AL.	
	Examiner Elena Tsoy	Art Unit 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/12/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 6-12, 14-15, and 17-23 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Mayer (US 5,633,037) and Applicants' admitted state of art.

The Examiner Note: US 5,633,037 is of the same patent family as EP 0 521 040 B2 that is described in the Applicants' specification at P1.

Mayer discloses a process for producing a multicoat refinish system which a pigment-free, aqueous, film-forming coating composition is first applied in the region of the defect in the OEM finish, followed by an aqueous refinish basecoat material (See column 1, lines 5-20). The coating composition may be a pigment-free extract of the aqueous refinish basecoat material (See column 3, lines 12-23). A clearcoat material is then applied wet on wet to the aqueous basecoat film, after which the films present are cured together (See column 1, lines 21-31). The Examiner takes official notice that it is a common knowledge in the art that wet on wet technique

Art Unit: 1792

involves flashing off each coat before applying a subsequent coat. The coating material is applied by e.g. a spray gun (claimed pneumatical spray application) (See column 4, lines 15-16) in the region of the area of damage with a dry film thickness of **2 to 50** μ (See column 3, lines 21-23) using the tapering-off technique (See column 4, lines 1-15). Mayer teaches that the repair of metallic paints is particularly difficult, since the shade and brightness of the special effect are highly dependent on the method of working; the width of the spray gun nozzle and the **spray pressure**, inter alia, play a crucial role (See column 1, lines 32-42) as well as the method of thinning and the spray viscosity likewise influence shade and special effect (See column 1, lines 42-43). The region of the adjacent original finish which is coated with the coating material using the tapering-off technique depends on many factors, for example the spray gun, the **spraying pressure**, the nature, size and position of the area of damage and similar (See column 4, lines 15-24). It is known in the repair art that in the case of metallic multicoat finishes the repair area and the adjacent parts are resprayed with a conventional, i.e. solvent-borne, highly thinned clearcoat after the preparative work described above, such as cleaning, sanding, surfacing, etc. (See column 1, lines 49-61); after the clearcoat coating produced in this way has been *surface-dried* at room temperature or a slightly elevated temperature, the area of damage is resprayed with special-effect paints, such as metallic basecoats, in such a way that the paint hides the area of damage and tapers off into the adjacent areas, i.e. from the edge of the area of damage outwards the film thickness gradually diminishes to 0 μ (See column 1, lines 62-67). In the case of difficult colors, the edge zone can be resprayed using **lower spray pressure** using low-solid conventional special-effect paints (See column 2, lines 1-5) and water-thinnable base materials (See column 3, lines 52-62).

If it could be argued that as metallic basecoats are sprayed over the first clear coat at lower pressure than the first clear layer, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have applied a basecoat at less pressure than the first layer with the expectation of providing the desired tapered optimum coverage of original finish.

Note that Applicants admitted that Mayer (EP 0521040 B2) disclosed all limitations of claimed invention (See P1 of the Applicants' specification) except that the known refinish process was unable to solve the existing problems since the refinish in the conventional sense, which of course is carried out above all in vehicle finishing workshops compared to overcoating on the line at the automaker's plant, since said overcoating requires quite different amounts of coating materials and an entirely different logistical system. However, Claim 1 does not recite logistical system. Therefore, Mayer reads on claim 1.

As to claim 3, The Examiner takes official notice that it is a common knowledge in the art that the OEM finish is produced conventionally by an electrostatic spray application.

As to claim 9-10, The aqueous or water-thinnable coating materials contain at least one water-thinnable or water-dispersible binder, preferably in amounts from 5 to 50% by weight, particularly preferably in amounts from 10 to 30%, in each case based on the total weight of the coating material. These binders can be chosen, for example, from the group of **acrylate**, **polyurethane** and/or polyester resins. If appropriate, they can be modified by functional groups which control the properties of the resins in a particular direction and/or are suitable for crosslinking of the resins using *curing agents*. The curing agents can be added to the aqueous or water-thinnable coating material under discussion, but they can also be contained in the basecoat and/or in the final clearcoat coating. See column 4, lines 36-65. **Polyurethanes** are generally

Art Unit: 1792

incompatible with water, unless special constituents are incorporated in their synthesis and/or special preparative steps are taken. Thus an acid value is incorporated which is high enough for the neutralized product to be dispersible in water to yield a stable dispersion binder (i.e ionically \ stabilized) (See column 7, lines 1-6).

As to claim 11, The aqueous coating materials used according to the invention may contain, if appropriate, 5 to 20% by weight, based on the total solids content of the coating material, of a water-thinnable amino resin, preferably melamine resin, and 5 to 20% by weight of a water-thinnable polyether (for example polypropylene glycol having a number average molecular weight of 400 to 900) (See column 14, lines 11-16).

As to claims 17-19, after drying of the basecoat at temperatures preferably at temperatures below 80.degree. C., for a period of 5 to 60 min., a suitable transparent topcoat composition is applied to the basecoat and--should the whole of the first coat not be provided with a basecoat--to the possibly still uncoated parts of the first coat. The topcoat composition is preferably applied so as to taper off into the uncoated region of the original finish or to the whole of the adjacent original finish up to an edge, decorative trim or similar in such a way that the original finish is hidden, since in this way time-consuming polishing work is eliminated. The dry film thickness of the topcoat is generally between 30 and 100 .mu.m. **1- or 2-component** clearcoats, both organic solvent-borne and aqueous, are suitable as the topcoat composition. *Clearcoats based on a hydroxyl-containing acrylate copolymer and a blocked polyisocyanate* are frequently used. Such clearcoats are disclosed, for example, in the patent applications DE 3,412,534, DE 3,609,519, DE 3,731,652 and DE 3,823,005. After a **flash-off** time of about 5 minutes, if necessary, the topcoat, where appropriate together with the basecoat and where

Art Unit: 1792

appropriate together with the coating obtained in stage (2) is dried at temperatures between room temperature and 140.degree. C., preferably at temperatures below 80.degree. C., for a period of 5 to 120 min the clear coat is flashed-off for about 5 minutes. See column 16, lines 40-67.

As to claim 23, In examples of Mayer, a multicoat original finish, such as is **customary in automotive production line painting**, is used as the substrate. It is unimportant whether the finishes are conventionally based or based on water-thinnable systems. The area of damage is simulated as in automotive production line painting. See column 17, lines 4-41.

4. Claims 4-5, and 13, 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mayer.

As was discussed above, Mayer teaches that spraying pressure is a result-effective parameter in a refinish process.

It is held that it is not inventive to discover the optimum or workable ranges of result-effective variables by routine experimentation. In re Antonie, 559 F.2d 618, 195 USPQ 6 (CCPA 1977). See also In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have determined the optimum values of the relevant spraying pressure parameters (including those of claimed invention) in Mayer through routine experimentation depending on particular application in the absence of showing of criticality.

As to claim 15, The Examiner takes official notice that it is a common knowledge in the coating art to use low humidity or air flow to accelerate drying the applied coating.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elena Tsoy whose telephone number is 571-272-1429. The examiner can normally be reached on Monday-Friday, 9:00AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Elena Tsoy, Ph.D.
Primary Examiner
Art Unit 1792

February 15, 2008

/Elena Tsoy /

Primary Examiner, Art Unit 1792